

REMARKS

Claims 1-15 are pending in this application. Claims 1-6 and 8-15 have been withdrawn as a result of an election made in response to a restriction requirement. Claim 7 is the only active claim in the present application and claim 7 stands rejected.

Claim 7 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,070,222 (Yahav *et al.*). For the reasons as set forth in detail below, the Applicants respectfully traverse the rejection of claim 7.

Claim 7 calls for an induction heating apparatus having a specific structure which can probably best be explained by referring to Fig. 1 of the present application. As shown in Fig. 1 and as called for in claim 7, the induction heating apparatus comprises an induction heating coil (12) for induction heating a matter, in the embodiment illustrated in Fig. 1, a pan (14). The apparatus further comprises a top plate (11) positioned between the pan and the heating coil, driving means (19) such as an inverter circuit for supplying a high frequency current to the induction heating coil and an electrostatic shield (16) provided between the top plate and the induction heating coil. The claim specifically calls for the electrostatic shield to have conductivity and to be connected to a low potential (for example, through a connection terminal (17) connected to a connection portion (16a) of the electrostatic shield). Claim 7 further calls for a stationary plate (15) positioned between the top plate and the induction coil. As shown in Fig. 1, the stationary plate is located on a first or lower side of the electrostatic shield. The stationary plate includes electrical insulation and a cover (18) covering the second or upper side of the electrostatic shield. As called for in claim 7, raw mica containing an adhesive is used for at least one of the stationary plate and the cover for the stationary plate and is heated after assembly to attain integration.

The structure of the induction heating apparatus in accordance with the present invention as called for in claim 7 provides several advantages as described in detail in the application. For example, as described at page 8, lines 10-25, since the conductive electrostatic shield is provided between the top plate and the induction heating coil and is connected to the low potential, the electrostatic coupling between the high voltage generated in the heating coil and the matter (pan) to be heated is decreased and the high frequency high voltage generated in the heating coil is

applied to the body of the user via straight capacitance between the heating coil and the matter to be heated whereby leakage current flowing in the body of the heater is suppressed. Further, as described at page 8, line 26, through page 9, line 20, since the stationary plate having insulation is provided between the top plate and the induction heating coil (*i.e.*, not part of the top plate) and is provided with the electrostatic shield, production is facilitated and also the influence of the high temperature of the matter to be heated on the electrostatic shield is relieved in comparison with the prior art in which the electrostatic shield and the connection portions are formed on the rear face of the top plate. Additionally, because the stationary plate and electrostatic shield are not components of the top plate, the shape and materials of both the stationary plate and the electrostatic shield can be designed to fit a particular application and particularly, the connection portion of the electrostatic shield can have a more stable configuration to thereby ensure greater reliability in the connection and less susceptibility to the influence of vibration.

The Yahav *et al.* patent also discloses an induction heating apparatus. As best shown in Figs. 3A and 3B, and the accompanying description at column 6, lines 52-64, the Yahav *et al.* apparatus includes a heating element (81) which is engaged on both the upper and lower sides by a layer of dielectric material (83) such as mica and metal plates (85) are located on the outer surfaces of each of the dielectric layers. The Applicants have carefully reviewed the Yahav *et al.* patent and can find no disclosure, teaching or even a suggestion of the use of an electrostatic shield positioned between the top plate and the induction heating coil which is connected to a low potential. In the embodiment shown in Figs. 15A – 15C and the accompanying text at column 10, lines 58-68, the Yahav patent discloses an induction heating apparatus including an induction generator assembly (400) having an induction generator (402) and a plurality of insulated foils (404) comprised of a high permeability insulative material installed in the lower portion of the induction generator (*i.e.*, below the coil). However, again, the Yahav patent fails to disclose, teach or suggest an electrostatic shield provided between the top plate and the induction coil and connected to a low potential. Accordingly, the Yahav *et al.* patent does not disclose, teach or suggest each and every feature as called for in claim 7 of the present invention. It is therefore respectfully submitted that the rejection of claim 7 under 35 U.S.C. § 102(b) should be withdrawn.

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CONCLUSION

In view of the foregoing discussion, it is respectfully submitted that claim 7 is in condition for allowance and such action is respectfully solicited.

Respectfully submitted,

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